

REMARKS

In the Office Action, the Examiner rejected claims 1-23 under 35 U.S.C. 102(e) as being anticipated by Willars (U.S. Patent No. 6,507,567). The Examiner rejected claims 14-29 and 42-44 under 35 U.S.C. 103(1) as being unpatentable over Willars. The Examiner rejected claims 3-35, 36-41, and 45-46 under 35 U.S.C. 103(a) as being unpatentable over Willars in view of Einola (U.S. Patent No. 6,438,370). The Applicants have amended independent claims 1, 14, 30, 36, 42, 45, and 46 to address this/these rejections. Applicants respectfully traverse these rejections with respect to independent claims 9, 20, 25, 43, and 44 and the claims that depend therefrom.

Willars does not anticipate pending claims 1-8

Amended claim 1 requires, inter alia, (1) upon a partial allocation of a set of RAN resources, responding to the packet data network indicating the partial allocation; and (2) upon a full allocation of the corresponding set of RAN resources, responding to the packet data network indicating the full allocation. Willars is directed to the allocation (and deallocation) of Radio Access Network (RAN, UTRAN for UMTS Terrestrial RAN) resources in order to meet a desired Quality of Service (QoS) requirement (Col. 2, line 13 et seq.). Remaining portions of Willars describe various techniques for such allocation (and deallocation). Among other shortcomings, Willars fails to address interaction between the RAN and a Packet Data Service Node (PDSN) when RAN resource allocation is (1) not available or (2) only partially available. Because Willars fails to disclose these limitations of claim 1, amended claim 1 is not anticipated by Willars.

Claim 2 requires, upon a partial allocation of RAN resources, remarking the data packet with a new packet service quality level indicator corresponding to a partial allocation of a

corresponding set of RAN resources. The Examiner cites Willars at col. 3 lines 17-60 and col. 10, lines 36-49 as meeting this additional limitation. However, a reading of Willars at these locations (and all other locations) reveals that Willars fails to disclose, suggest, or teach these additional limitations. Thus, claim 2 is not anticipated by Willars. Claim 3, dependent from claim 2, requires packet remarking with a new packet service quality level indicator and is allowable for this additional reason. Claims 4-8 are not anticipated by Willars for at least the reasons provided above relating to amended claim 1.

Willars does not anticipate pending claims 9-13

Claim 9 requires, inter alia, (1) receiving a data packet from a Mobile Station (MS) serviced by the RAN; (2) determining a set of RAN resources that have been allocated to service the transmission of the data packet; (3) mapping the allocated set of RAN resources to a RAN service quality level indicator; and (4) when the packet service quality level indicator does not correspond to the RAN service quality level indicator, remarking the data packet with a new packet service quality level indicator corresponding to the RAN service quality level indicator. In the Action, the Examiner cites Willars at col. 2, lines 13-65 as meeting these limitations. Applicants respectfully traverse this assertion. Willars fails to disclose, suggest, or even address remarking of data packets from a mobile station as required by claim 9. Thus, the anticipation rejection of claim 9 is improper and must be withdrawn. Claims 10-13 are allowable for these same reasons and for the additional reasons corresponding to their additional limitations.

Willars does not render obvious pending claims 14-19 and 42

Amended claim 14 is directed to a Packet Data Serving Node (PDSN) that includes structure performing operations the same as or similar to those required by amended claim 1. Thus, amended claim 14 is allowable for the same reasons as provided above

regarding amended claim 1. Claims 15 and 16 include limitations similar to those of claims 2 and 3, respectively, and are allowable for the same reasons as provided above. Claims 17-19 depend from amended claim 14 and are allowable for the reasons provided regarding amended claim 14. Amended claim 42 is directed to corresponding software instructions executed by a PDSN and is allowable for the reasons provided for amended claim 14.

Willars does not render obvious pending claims 20-24 and 43

Claim 20 is directed to a Base Station Controller (BSC) that (1) receives a data packet from a Mobile Station (MS) serviced by the RAN, (2) determines a set of allocated RAN resources that are servicing the transmission of the data packet to the packet data network; (3) maps the allocated set of RAN resources to a RAN service quality level indicator; and (4) when the packet service quality level indicator does not correspond to the RAN service quality level indicator, indicates to the PDSN a new packet service quality level indicator corresponding to the RAN service quality level indicator. Willars fails, to disclose, among other things, for packets received from a MS, (a) mapping allocated RAN resources to a RAN service quality level indicator; and (b) indicating to the PDSN a new packet service quality level indicator corresponding to the RAN service quality level indicator as required by claim 20. As described above, Willars is directed primarily to mapping a QoS to a set of RAN resources and to allocating those resources. Thus, claim 20 is not rendered obvious by Willars and the Applicants respectfully traverse this rejection. Claims 21-24 depend from claim 20 and are allowable for the reasons provided regarding claim 20. Claim 43 is directed to corresponding software instructions executed by a BSC and is allowable for the reasons provided for claim 20.

Willars does not render obvious pending claims 25-29 and 44

Claim 25 is directed to a Packet Control Function (PCF) that performs operations similar

to/same as the operations performed by the BSC of claim 20. Thus, claim 25 is allowable for the reasons cited above with reference to claim 20. Claims 26-29 depend from claim 25 and are allowable for the reasons provided regarding claim 25. Claim 44 is directed to corresponding software instructions executed by a PCF and is allowable for the reasons provided for claim 25.

Willars in combination with Einola does not render obvious pending claims 30-35 and 45

Amended claim 30 is directed to a BSC that includes structure performing operations the same as or similar to those required by amended claim 1. As described above, Willars fails to meet the limitations of amended claim 1. Einola is primarily concerned with location updating and fails to meet the shortcomings of Willars. Thus, amended claim 30 is not rendered obvious by Willars in combination with Einola. Claims 31-35 depend from claim 30 and are allowable for the reasons provided regarding claim 30. Amended claim 45 is directed to corresponding software instructions executed by a BSC and is allowable for the reasons provided for claim 30.

Willars in combination with Einola does not render obvious pending claims 36-41 and 46

Amended claim 36 is directed to a Packet Control Function (PCF) that includes structure performing operations the same as or similar to those required by amended claim 1. Thus, amended claim 36 is allowable for the same reasons as provided above regarding amended claim 1. Claims 37-41 depend from claim 36 and are allowable for the reasons provided regarding amended claim 36. Amended claim 43 is directed to corresponding software instructions executed by a PCF and is allowable for the reasons provided for amended claim 36.

CONCLUSIONS

All pending claims are now allowable. A Notice of Allowance is courteously solicited.

Please direct any questions to the undersigned attorney.

Respectfully submitted,

Date: June 4, 2004

By:


Bruce E. Garlick, Reg. 36,520

RECEIVED
CENTRAL FAX CENTER

JUN 04 2004

OFFICIAL

Garlick, Harrison & Markison

P.O. Box 160727

Austin, Texas 78716-0727

(512) 264-8816

(512) 264-3735 fax